moisture or leakage is detected, the covering should be removed and the piping thoroughly examined. No piping with a nominal size of 3 inches or less need be hydrostatically tested.

(c) The setting of safety and relief valves installed in piping systems shall be checked by the marine inspector at each inspection for certification.

[CGFR 68-82, 33 FR 18890, Dec. 18, 1968, as amended by CGD 73-248, 39 FR 30839, Aug. 26, 1974; CGD 83-043, 60 FR 24782, May 10, 1995]

# §61.15-10 Liquefied petroleum gas piping for heating and cooking.

(a) Leak tests as described in paragraph (b) of this section shall be conducted at least once each month and at each inspection for certification. The tests required at monthly intervals shall be conducted by a licensed officer of the vessel or qualified personnel acceptable to the Officer in Charge, Marine Inspection. The owner, master, or person in charge of the vessel shall keep records of such tests showing the dates when performed and the name(s) of the person(s) and/or company conducting the tests. Such records shall be made available to the marine inspector upon request and shall be kept for the period of validity of the vessel's current certificate of inspection. Where practicable, these records should be kept in or with the vessel's logbook.

(b) Test system for leakage in accordance with the following procedure: With appliance valve closed, the master shutoff valve on the appliance open, and with one cylinder valve open, not pressure in gage. Close cylinder valve. The pressure should remain constant for at least 10 minutes. If the pressure drops, locate leakage by application of liquid detergent or soapy water solution at all connections. Never use flame to check for leaks. Repeat test for each cylinder in a multicylinder system.

## §61.15-12 Nonmetallic expansion joints.

(a) Nonmetallic expansion joints must be examined externally at each inspection for certification for signs of excessive wear, fatigue, deterioration, physical damage, misalignment, improper flange-to-flange spacing, and

leakage. A complete internal examination must be conducted when an external examination reveals excessive wear or other signs of deterioration or damage.

(b) A nonmetallic expansion joint must be replaced 10 years after it has been placed into service if it is located in a system which penetrates the side of the vessel and both the penetration and the nonmetallic expansion joint are located below the deepest load waterline. The Officer in Charge, Marine Inspection may grant an extension of the ten year replacement to coincide with the vessel's next drydocking.

[CGD 77-140, 54 FR 40615, Oct. 2, 1989, as amended by CGD 95-028, 62 FR 51202, Sept. 30, 1997]

#### §61.15-15 Other piping.

(a) All other piping systems shall be examined under working conditions as required by the marine inspector.

## Subpart 61.20—Periodic Tests of Machinery and Equipment

### §61.20-1 Steering gear.

- (a) Steering gear shall be tested and inspected by the marine inspector at each inspection for certification and oftener if necessary.
- (b) All devices employed in the change-over from automatic to manual operation shall be examined and tested.

#### §61.20-3 Main and auxiliary machinery and associated equipment, including fluid control systems.

- (a) At each inspection for certification the marine inspector shall conduct such tests and inspections of the main propulsion and auxiliary machinery and of its associated equipment, including the fluid control systems, as he feels necessary to check safe operation.
- (b) Remote control for the means of stopping machinery driving forced and induced draft fans, fuel oil transfer pumps, fuel oil unit pumps, and fans in the ventilation systems serving machinery and cargo spaces shall be tested at each regular inspection for certification.